

# Notice of Allowability

Application No.

10/080,795

Examiner

Young J. Kim

Applicant(s)

KAMME ET AL.

Art Unit

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment received on September 7, 2007.
2. ☒ The allowed claim(s) is/are 1,2,4-14 and 16-23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

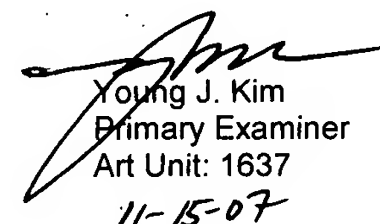
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached:
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

YOUNG J. KIM  
PRIMARY EXAMINER

  
Young J. Kim  
Primary Examiner  
Art Unit: 1637  
11-15-07

### DETAILED ACTION

The present Office Action is responsive to the Amendment received on September 7, 2007.

#### *Preliminary Remark*

Claims 3, 15, and 24-26 are canceled.

#### *Claim Rejections - 35 USC § 112*

The scope of enablement rejection of claims 1, 4-14, 16, and 18-23 under 35 U.S.C. 112, first paragraph, for enabling for a method wherein Bst DNA polymerase is not involved in a reaction temperature of 80°C, while not reasonably providing enablement for said method, wherein Bst DNA polymerase is involved in a reaction temperature of 80°C, made in the Office Action mailed on April 17, 2007 is withdrawn in view of the Amendment received on September 7, 2007.

#### *Claim Rejections - 35 USC § 103*

The rejection of claims 1, 2, 4-14, and 16-23 under 35 U.S.C. 103(a) as being unpatentable over Mack et al. (U.S. Patent No. 6,566,502 B1, issued May 20, 2003, filed June 30, 2000) in view of Bacallao et al. (U.S. Patent No. 7,186,507 B2, issued March 6, 2007, priority December 9, 1999<sup>1</sup>), made in the Office Action mailed on April 17, 2007 is withdrawn in view of the Amendment received on September 7, 2007.

In particular, Applicants' argument regarding the unexpected result of using Bst polymerase in the second strand cDNA synthesis, as substantiated in the instant specification on page 32, Table 2 is found to be convincing.

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<sup>1</sup> U.S. Patent 7,186,507, is a national phase of PCT/US00/33460, filed after November 29, 2000, designating U.S. as one of the countries, and published in English. Under the amended AIPA act, the 102(e) date for such national phase

### **Examiner's Reasons for Allowance**

The instant application is allowed based on Applicants' convincing argument, substantiated by the instant specification that the use of Bst DNA polymerase in a second strand cDNA synthesis yielded unexpectedly higher yield of cDNA (discussed above).

On page 32 of the instant specification, it is stated:

"Remarkably, the yield of cDNA using Bst at 65°C was three-fold higher than using E. coli DNA polymerase 1 for two hours at 16°C." (page 32, lines 8-10).

While Bacallao et al. contemplate that a plurality of DNA polymerases (including Bst DNA polymerase) could be employed for second strand cDNA synthesis, the artisans do not actually employ the Bst DNA polymerase in a second strand cDNA synthesis, and thus, the unexpected results obtained by Applicants could not have been predicted by one of ordinary skill in the art.

Therefore, Applicants' discovery of unexpected result sufficiently distinguishes the claimed invention from the prior art.

### ***Inquiries***

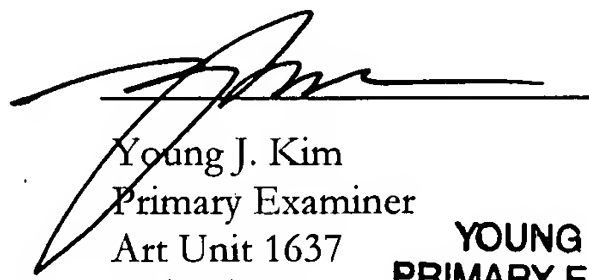
Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Young J. Kim whose telephone number is (571) 272-0785. The Examiner is on flex-time schedule and can best be reached from 8:30 a.m. to 4:30 p.m (M-W and F). The Examiner can also be reached via e-mail to Young.Kim@uspto.gov. However, the office cannot guarantee security through the e-mail system nor should official papers be transmitted through this route.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Dr. Gary Benzion, can be reached at (571) 272-0782.

Art Unit: 1637

Papers related to this application may be submitted to Art Unit 1637 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 CFR 1.6(d)). NOTE: If applicant does submit a paper by FAX, the original copy should be retained by applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED, so as to avoid the processing of duplicate papers in the Office. All official documents must be sent to the Official Tech Center Fax number: (571) 273-8300. For Unofficial documents, faxes can be sent directly to the Examiner at (571) 273-0785. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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11/15/2007

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